

APPENDIX A

Table 1. Series 1 Data

compound_no	Class of strain	1 - A	1 - B	1 - C
	cephem-sensitive: S			
1	S. aureus SMITH	G(+)	S	2
2	S. aureus SR6637 (H-MRSA)	G(+)	R	32
3	S. aureus SR20067 (H-MRSA)	G(+)	R	>128
4	S. pneumoniae SR16675 (PRSP)	G(+)	R	8
5	E. coli NIH JC-2	G(-)	S	0.125
6	E. coli SR21003 (Toho2)	G(-)	R	2
7	E. cloacae ATCC 13047	G(-)	S	0.5
8	E. cloacae SR4321 (Bla++)	G(-)	R	2
9	P. aeruginosa SR24	G(-)	S	1
10	P. aeruginosa SR24-12 (bla+)	G(-)	R	8
11	P. aeruginosa SR5393	G(-)	S	8
12	P. aeruginosa SR6554 (IPM-R)	G(-)	R	64
13	H. influenzae ATCC49766	G(-)	S	128
14	H. influenzae SR11435 (BLNAR)	G(-)	R	0.25
15	B. catarrhalis ATCC43617 (Bla +)	G(-)	S	0.016

Table 2. Series 2 Data

compound_no	Class of strain	2 - A	2 - B	2 - C
	cephem-			
	sensitive: S			
	cephem-			
	resistant: R			
1	S. aureus SMITH	G(+)	S	1
2	S. aureus SR3637 (H-MRSA)	G(+)	R	16
3	S. aureus SR20067 (H-MRSA)	G(+)	R	32
4	S. pneumoniae SR16675 (PRSP)	G(+)	R	2
5	E. coli NIHJ JC-2	G(-)	S	0.25
6	E. coli SR21003 (Tnho2)	G(-)	R	1
7	E. cloacae ATCC 13047	G(-)	S	0.25
8	E. cloacae SR4321 (Bla ⁺⁺)	G(-)	R	2
9	P. aeruginosa SR24	G(-)	S	1
10	P. aeruginosa SR24-12 (bla ^{a+})	G(-)	R	4
11	P. aeruginosa SR5393	G(-)	S	2
12	P. aeruginosa SR6554 (IPM-R)	G(-)	R	8
13	H. influenzae ATCC49766	G(-)	S	0.016
14	H. influenzae SR11435 (BLNAR)	G(-)	R	0.032
15	B. catarrhialis ATCC43617 (Bla ^a +)	G(-)	S	0.016

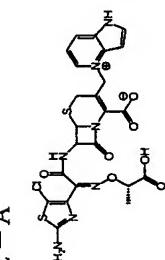
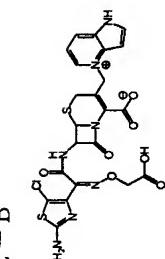
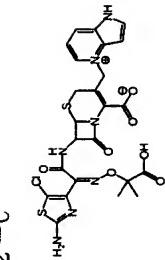


Table 3. Series 3 Data

compound_no	Class of strain	3 - A	3 - B	3 - C
	cephein-sensitive: S cephein-resistant: R			
1	S. aureus SMITH	G(+) S	4	8
2	S. aureus SR3637 (H-MRSA)	G(+) R	32	32
3	S. aureus SR20067 (H-MRSA)	G(+) R	128	128
4	S. pneumoniae SR16675 (PRSP)	G(+) R	2	2
5	E. coli NIHJ JC-2	G(-) S	0.5	0.25
6	E. coli SR21003 (Toboz2)	G(-) R	2	2
7	E. cloacae ATCC 13047	G(-) S	1	1
8	E. cloacae SR4321 (Bla ⁺)	G(-) R	8	64
9	P. aeruginosa SR24	G(-) S	1	1
10	P. aeruginosa SR24-12 (bla ⁺)	G(-) R	8	32
11	P. aeruginosa SR5393	G(-) S	4	8
12	P. aeruginosa SR6554 (IPM-R)	G(-) R	16	32
13	H. influenzae ATCC49766	G(-) S	0.063	0.125
14	H. influenzae SR11435 (BLNAR)	G(-) R	0.125	0.5
15	B. catarrhalis ATCC43617 (Bla ⁺)	G(-) S	0.032	0.031

Table 4. Series 4 Data

compound_no	Class of strain	4 - A	4 - B	4 - C
	cephem ⁺ sensitive: S			
	cephem ⁻ resistant: R			
1	S. aureus SMITH	G(+) S	2	2
2	S. aureus SR3637 (H-MRSA)	G(+) R	16	16
3	S. aureus SR20067 (H-MRSA)	G(+) R	64	64
4	S. pneumoniae SR16675 (PRSP)	G(+) R	1	1
5	E. coli NIH JC-2	G(-) S	0.125	0.063
6	E. coli SR21003 (Tnho2)	G(-) R	0.5	0.5
7	E. cloacae ATCC 13047	G(-) S	1	1
8	E. cloacae SR4321 (Bla ⁺⁺)	G(-) R	16	16
9	P. aeruginosa SR24	G(-) S	0.5	1
10	P. aeruginosa SR24-12 (bla ⁺)	G(-) R	8	16
11	P. aeruginosa SR5393	G(-) S	4	4
12	P. aeruginosa SR6554 (IPM-R)	G(-) R	16	16
13	H. influenzae ATCC49766	G(-) S	0.032	0.032
14	H. influenzae SR11435 (BLNAR)	G(-) R	0.063	0.125
15	B. catarrhalis ATCC43617 (Bla ⁺)	G(-) S	0.016	0.032

Table 5. Series 5 Data

compound_no	Class of strain	cephem- sensitive: S	cephem- resistant: R	5 - A	5 - B	5 - C
1	S. aureus SMITH	G(+)	S	4	4	4
2	S. aureus SR3637 (H-MRSA)	G(+)	R	64	64	32
3	S. aureus SR20067 (H-MRSA)	G(+)	R	128	128	128
4	S. pneumoniae SR16675 (PRSP)	G(+)	R	2	2	2
5	E. coli NIHJ JC-2	G(-)	S	0.125	0.125	0.125
6	E. coli SR21003 (Toho2)	G(-)	R	1	1	1
7	E. cloacae ATCC 13047	G(-)	S	0.5	0.5	4
8	E. cloacae SR4321 (Bla++)	G(-)	R	8	0.5	2
9	P. aeruginosa SR24	G(-)	S	2	32	8
10	P. aeruginosa SR24-12 (bla+)	G(-)	R	8	1	2
11	P. aeruginosa SR5393	G(-)	S	4	8	8
12	P. aeruginosa SR6554 (IPM-R)	G(-)	R	16	32	32
13	H. influenzae ATCC49786	G(-)	S	0.032	0.063	0.063
14	H. influenzae SR11435 (BLNAR)	G(-)	R	0.053	0.25	0.125
15	B. catarrhalis ATCC43617 (Bla +)	G(-)	S	0.032	0.031	0.031

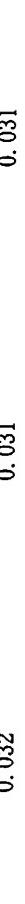
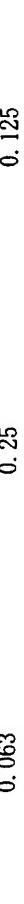
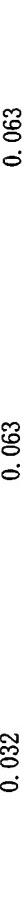
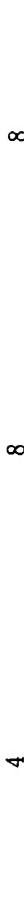
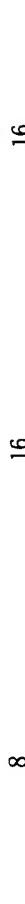
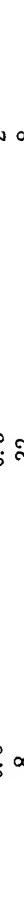
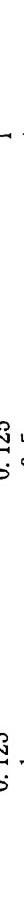
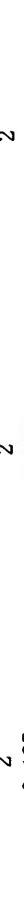
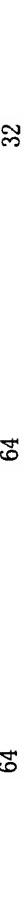
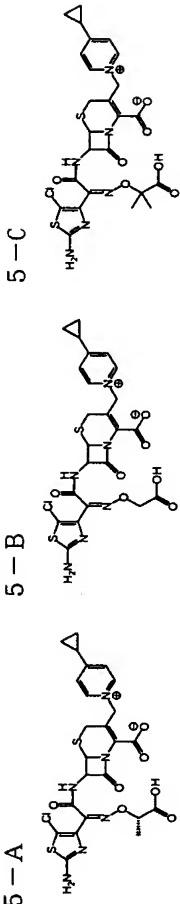
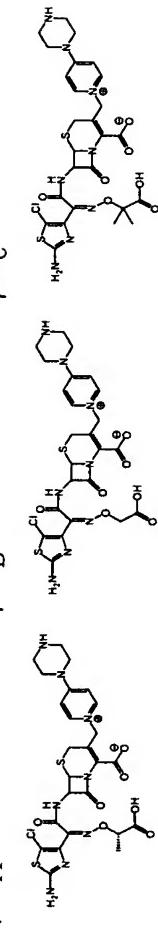


Table 6. Series 6 Data

compound_no	Class of strain	6 - A	6 - B	6 - C
	cephem ⁻ sensitive: S cephem ⁼ resistant: R			
1	S. aureus SMITH	G(+) S	4	8
2	S. aureus SR3637 (H-MRSA)	G(+) R	64	32
3	S. aureus SR20067 (H-MRSA)	G(+) R	128	128
4	S. pneumoniae SR16675 (PRSP)	G(+) R	2	4
5	E. coli NIH JC-2	G(-) S	0.25	2
6	E. coli SR21003 (Toho2)	G(-) R	2	4
7	E. cloacae ATCC 13047	G(-) S	2	4
8	E. cloacae SR321 (Bla++)	G(-) R	32	32
9	P. aeruginosa SR24	G(-) S	2	2
10	P. aeruginosa SR24-12 (Bla+)	G(-) R	16	32
11	P. aeruginosa SR5393	G(-) S	8	8
12	P. aeruginosa SR6554 (IPM-R)	G(-) R	32	64
13	H. influenzae ATCC49766	G(-) S	0.063	0.063
14	H. influenzae SR11435 (BLNAR)	G(-) R	0.125	0.125
15	B. cattarrhalis ATCC43617 (Bla +)	G(-) S	0.032	0.031

Table 7. Series 7 Data

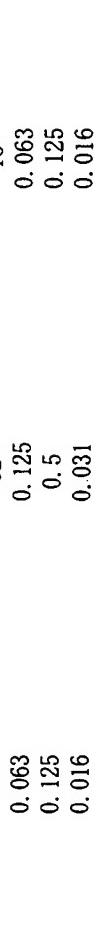
compound_no	Class of strain	7-A	7-B	7-C
	cephem-sensitive: S cephem-resistant: R			
1	S. aureus SMITH	G(+)	S	4
2	S. aureus SR3637 (H-MRSA)	G(+)	R	64
3	S. aureus SR20067 (H-MRSA)	G(+)	R	>128
4	S. pneumoniae SR16675 (PRSP)	G(+)	R	>128
5	E. coli NIHJ JC-2	G(-)	S	8
6	E. coli SR21003 (Toho2)	G(-)	R	0.25
7	E. cloacae ATCC 13047	G(-)	S	1
8	E. cloacae SR4321 (Bla++)	G(-)	R	0.5
9	P. aeruginosa SR24	G(-)	S	4
10	P. aeruginosa SR24-12 (bla+)	G(-)	R	0.5
11	P. aeruginosa SR5393	G(-)	S	0.063
12	P. aeruginosa SR6554 (IPM-R)	G(-)	R	0.125
13	H. influenzae ATCC49766	G(-)	S	0.125
14	H. influenzae SR111435 (BLNAR)	G(-)	R	0.5
15	B. catarrhalis ATCC43617 (Bla +)	G(-)	S	0.016



7-A

7-B

7-C



7-C

Table 8. Series 8 Data

compound_no	Class of strain	8 - A	8 - B	8 - C
	cephem ⁻ sensitive: S			
	cephem ⁻ resistant: R			
1	S. aureus SMITH	G(+) S		8
2	S. aureus SR3637 (H-MRSA)	G(+) R		64
3	S. aureus SR20067 (H-MRSA)	G(+) R		128
4	S. pneumoniae SR16675 (PRSP)	G(+) R		4
5	E. coli NIH JC-2	G(-) S		4
6	E. coli SR21003 (Toho2)	G(-) R		4
7	E. cloacae ATCC 13047	G(-) S		8
8	E. cloacae SR4321 (Bla ⁺)	G(-) R		2
9	P. aeruginosa SR24	G(-) S		64
10	P. aeruginosa SR24-12 (bla ⁺)	G(-) R		1
11	P. aeruginosa SR5393	G(-) S		32
12	P. aeruginosa SR6554 (IPM-R)	G(-) R		4
13	H. influenzae ATCC49766	G(-) S		16
14	H. influenzae SR11435 (BLNAR)	G(-) R		0.125
15	B. catarrhialis ATCC43617 (Bla ⁺)	G(-) S		0.25
				0.031
				0.032

Table 9. Series 9 Data

compound_no	Class of strain	9 - A	9 - B	9 - C
	cephem- sensitive: S cephem- resistant: R			
1	S. aureus SMITH	G(+)	S	4
2	S. aureus SR36337 (H-MRSA)	G(+)	R	32
3	S. aureus SR20067 (H-MRSA)	G(+)	R	>128
4	S. pneumoniae SR16675 (PRSP)	G(+)	R	4
5	E. coli NIHJ JC-2	G(-)	S	0.25
6	E. coli SR21003 (Toho2)	G(-)	R	1
7	E. cloacae ATCC 13047	G(-)	S	1
8	E. cloacae SR4321 (Bla ⁺⁺)	G(-)	R	16
9	P. aeruginosa SR24	G(-)	S	64
10	P. aeruginosa SR24-12 (bla ⁺)	G(-)	R	1
11	P. aeruginosa SR5393	G(-)	S	32
12	P. aeruginosa SR6554 (IPM-R)	G(-)	R	-
13	H. influenzae ATCC49766	G(-)	S	16
14	H. influenzae SR11435 (BLNAR)	G(-)	R	0.032
15	B. catarrhalis ATCC43617 (Bla ⁺)	G(-)	S	0.031